

L.S.H. ✓  
 \* EX

|                               |                        |                     |  |
|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/664,534             | MOSTAFAVI, HASSAN   |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Elias Desta            | 2857                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed on 01/7/2005.
2. ☒ The allowed claim(s) is/are 26-44 and 46-52 (or renumbered as claims 1-26).
3. ☒ The drawings filed on 16 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                    |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>04/28/2005</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>01/11/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                           |
|  | 9. <input type="checkbox"/> Other _____.   |

## Detailed Action

### IDS

1. The information disclosure statement (IDS) submitted on January 7, 2005 was filed after the mailing date of the allowance on October 7, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### Examiner Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claims 44 and 46 are amended and claim 45 is canceled:

In reference to claim 44:

A method for gating an execution of a procedure [that involves use of a radiation], comprising: determining a variable representative of a degree of completion of a cycle of a physiological movement; and gating an execution of a [the] procedure based upon the variable; wherein the determining comprises using a first set of data representative of the physiological movement at a first time and a second set of data related to the physiological movement at a second time.

Art Unit: 2857

In reference to claim 46:

- The method of claim 45 [44], wherein the comparing comprises pattern matching the first set of data with the second set of data.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Gerald Chan (Applicant's attorney) on April 28, 2005.

### Terminal Disclaimer

3. The terminal disclaimer filed on June 15, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173, as presently shortened by any terminal disclaimer, of any patent granted based on U.S. Patent No. 6,621,889 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### Allowance

4. Claims 26-44 and 46-52 are allowed. The following is an examiner's statement of reasons for allowance

In reference to claims 26 and 44: Heid (U.S. Patent 5,662,112) teaches method for time and location resolved display of functional brain activities of a patient (see Heid, Fig. 1). The physiological processes are simulated in a patient by a simulation function where the simulation function is non-periodic (see Heid, Abstract).

The claimed invention provides a method of therapeutic radiation. Unlike Heid, the method includes measuring the first set of signal data of the physiological movement during the first period and correlating the first set with a second set through pattern matching. If the degree of deviation is exceeding from outside a given threshold, then the radiation is applied to the patient. Further the claimed invention uses autocorrelation and absolute difference function to match the patterns of the two data sets obtained from the patient where the degree of match is used to provide a better threshold comparison for administering the radiation.

The remaining claims are dependent upon claims 26 and 44 and contain further limitations.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is

Art Unit: 2857


assigned are (703)-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1750.

Elias Desta  
Examiner  
Art Unit 2857

-ed

April 21, 2005



**PATRICK ASSOUD**  
**PRIMARY EXAMINER**